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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/986,410	11/08/2001	Ryosuke Furue	Q67066	5224

7590 07/21/2003

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EXAMINER

GAGLIARDI, ALBERT J

ART UNIT	PAPER NUMBER
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2878

DATE MAILED: 07/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/986,410

Applicant(s)

FURUE, RYOSUKE

Examiner

Albert J. Gagliardi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mueller *et al.* (US 6,373,074 B1).

Regarding claim 1, *Mueller* discloses (Figs. 1, 4, and 6-7) a radiation image information recording/reading apparatus comprising: an image recording unit (70) for recording image information in a stimuable phosphor sheet by irradiating radiation onto the sheet (col. 10, lines 46-51); a stimulating main scan means (10, 11) for the sheet with excitation light; a vertical scan means (70, 71), 73); a photoelectric detection means (12) for detecting emitted light from a side of irradiation of the excitation light; and an erasing means (74); and wherein the excitation light main scan means comprises a linear light source (11) for emitting light in the form of fan beams (see generally Fig. 4) and the detection means comprises a line sensor (12).

Regarding the scan means being located on a side opposite a side of the irradiation of the radiation, the examiner notes that while *Mueller* does not specifically identify the particular direction from which the radiation may be irradiated, the embodiment as shown according to Fig. 6 disclosing two scan means (one on each side of the sheet) inherently suggests that the particular side on which the scan means is located is not critical to the invention and therefore, absent some degree of criticality, would have been a matter of routine design choice within the skill of a person of ordinary skill in the art depending on the needs of the particular application.

2. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Mueller* as applied above, and further in view of Kohda *et al.* (US 5,151,604).

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Regarding claim 2, although *Mueller* does not provide specific details of the specific type of stimuable phosphor sheet used in the apparatus, the examiner notes that a wide variety of stimuable phosphors sheets are known in the art, including sheets having a phosphor layer and a reflection layer wherein the phosphor layer is located closer to the excitation light scan means (see for example *Kohda* at Fig. 1-(3) and col. 5, lines 38-60). As such, it would have been a matter of routine design choice within the skill of a person of ordinary skill in the art to utilize one of the known functionally equivalent stimuable phosphor sheets, as suggested by *Kohda*, so as to produce a radiation image with high sensitivity.

3. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Mueller* and *Mueller* in view of *Kohda* as applied above, and further in view of Goodman *et al.* (US 5,874,744).

Regarding claim 3 and 4, although *Mueller* and *Kohda* do not provide specific details of the specific type of stimuable phosphor sheet used in the apparatus, the examiner notes that a wide variety of stimuable phosphors sheets are known in the art, including anisotropic phosphor sheets (see for example *Goodman* at Fig. 1; col. 1, lines 12-38; and col. 2, lines 5-10). As such, it would have been a matter of routine design choice within the skill of a person of ordinary skill in the art to utilize one of the known functionally equivalent stimuable phosphor sheets, as suggested by *Goodman*, so as to produce a radiation image with high sensitivity.

Note: although claim 2-4 have been rejected on the basis of prior art, the examiner notes that regardless of the obviousness of the use of a specific stimuable phosphor sheet, such claims would not otherwise be patentable because it has been held that the material or object

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manipulated in an apparatus (in this case the stimuable phosphor sheet) does not impart patentability to the apparatus (see MPEP 2115).

4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Mueller* and *Mueller* in view of *Kohda* and *Mueller* in view of *Kohda* and *Goodman* as applied above, and further in view of *Ohta* (US 5,381,017).

Regarding claim 5, although *Mueller*, *Kohda*, and *Goodman* do not disclose the use of a radiation absorption plate such absorption plates are well known. *Ohta*, for example, discloses (Fig. 1A) a radiation image storage apparatus (1) comprising a radiation absorption plate placed close to the surface of the phosphor sheet (10) on the side opposite the side of the radiation irradiation and which is moved away from the sheet after the radiation irradiation (i.e., during readout) (col. 4, lines 24-30 and lines 54-59). *Ohta* teaches that such plate allows for improved imaging by reducing back scattered radiation (col. 4, lines 60-63). As such, it would have been obvious to modify the device so as to utilize an absorption plate, as suggested by *Ohta* so as to allow for an improved image.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Albert J. Gagliardi whose telephone number is (703) 305-0417. The examiner can normally be reached on Monday thru Friday from 9 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David P. Porta can be reached on (703) 308-4852. The fax phone numbers for the

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organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



Albert J. Gagliardi
Examiner
Art Unit 2878

AJG
July 8, 2003